

Notice of Allowability

Application No.

10/629,543

Examiner

Hoang-Vu A. Nguyen-Ba

Applicant(s)

HA, CHANG JIN

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 6/13/06.
2. ☒ The allowed claim(s) is/are 1,6-9,11-18, 20-23 and 26-27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 2/15/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



ANTONY NGUYEN-BA
PRIMARY EXAMINER

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in telephone interviews with Attorney Samuel Ntiro, on September 20, 25 and 26, 2006.

The application has been amended as follows:

In the Claims:

1. (Currently Amended) An apparatus for recording firmware in a computer system, comprising:

a first memory divided into at least two blocks that store different system programs, a second block of said at least two blocks further storing a recovery program for performing a firmware recovery operation; and

a second memory that temporarily stores the recovery program when received from the second block when a first block of said at least two blocks has a failure, the recovery program performing said operation to selectively update firmware in the first ~~second~~ block of the first memory,

wherein the first memory is a ROM that includes a main block which corresponds to the first block and an auxiliary block which corresponds to the second block, the main block storing the firmware for operating the system and the auxiliary block comprising at least one system recovery function routine firmware, and wherein the firmware stored in the auxiliary block is at least one of a Power On Self Test (POST), a Power On or a Flash routine for recovering the system.

2-5 (Canceled)

7. (Currently Amended) An apparatus for recording firmware in a portable computer system, comprising:
a micro-controller; and

a first memory coupled to the micro-controller that is divided into first and second blocks, wherein the first and second blocks store different system programs and wherein the second block further stores a recovery program for performing a firmware recovery operation, and

wherein the first block stores a program or data for performing general system controller functions and the second block stores a program or data for performing at least one of a Power On Self Test (POST), Power On, or flash routines for the system.

9. (Currently Amended) A method for recording firmware in a computer system, comprising:

dividing an area for storing different system programs into at least two blocks;

recording a first program on a first block; and

recording a second program for selectively updating the first program on a second block, said dividing including:

logically dividing a ROM where firmware is recorded into a main block and an auxiliary block, said area including the ROM, wherein main firmware is recorded on the main block and auxiliary firmware for selectively deleting, recording and updating the main firmware is recorded on the auxiliary block, and

wherein the main block stores a program or data for performing general system controller functions and the auxiliary block stores a program or

data for performing at least one of a Power On Self Test (POST), Power On, or flash routines for the system.

10. (Canceled)

11. (Currently Amended) The method according to claim 2 40, wherein the ROM stores the system ~~control~~ programs.

12. (Currently Amended) The method according to claim 2 40, further comprising:

- determining a control block;
- loading firmware of the control block to a controller RAM; and
- selectively blanking and updating a controlled block.

19. (Canceled)

22. (Currently Amended) A method for recording firmware in a computer system, comprising:

- logically dividing a ROM into a main block and an auxiliary block that store different programs;
- recording main firmware on the main block;
- recording auxiliary firmware for selectively deleting and recording the main firmware on the auxiliary block;
- confirming an update command for the firmware recorded on the ROM;
- loading a control program for executing the update command to a RAM;

confirming one of the main block and the auxiliary block as an object block to which new firmware will be recorded; and

deleting the contents of the object block and recording the new firmware thereon, wherein the main block stores a program or data for performing general system controller functions and the auxiliary block stores a program or data for performing at least one of a Power On Self Test (POST), Power On, or flash routines for the system.

24. (Canceled)

25. (Canceled)

In the Amendment, filed 6/13/06, p. 2 to p. 12: in the header delete “09/750,507” and insert – 10/629,543 --

In the Abstract:

at lines 1 and 5: after “in a computer system can” delete “includes” and insert – include –

Examiner's Statement of Reasons for Allowance

2. Claims 1, 6-9, 11-18, 20-23 and 26-27 are allowed.

3. The following is an examiner's statement of reasons for allowance.

The prior art of record, i.e., U.S. Patent No. 6,442,067 to Chawla et al., and the art made of record, i.e., U.S. Patent No. 5,960,445 to Tamori, whether taken alone or in combination, fail to teach or suggest the following features, when these features are taken in combination with the remaining features of the claim:

wherein the first memory is a ROM that includes a main block which corresponds to the first block and an auxiliary block which corresponds to the second block, the main block storing the

firmware for operating the system and the auxiliary block comprising at least one system recovery function routine firmware, and wherein the firmware stored in the auxiliary block is at least one of a Power On Self Test (POST), a Power On or a Flash routine for recovering the system (independent claim 1);

wherein the first block stores a program or data for performing general system controller functions and the second block stores a program or data for performing at least one of a Power On Self Test (POST), Power On, or flash routines for the system (independent claim 7);

logically dividing a ROM where firmware is recorded into a main block and an auxiliary block, said area including the ROM, wherein main firmware is recorded on the main block and auxiliary firmware for selectively deleting, recording and updating the main firmware is recorded on the auxiliary block, and

wherein the main block stores a program or data for performing general system controller functions and the auxiliary block stores a program or data for performing at least one of a Power On Self Test (POST), Power On, or flash routines for the system (independent claim 9);

wherein the main block stores a program or data for performing general system controller functions and the auxiliary block stores a program or data for performing at least one of a Power On Self Test (POST), Power On, or flash routines for the system (independent claim 22).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (571) 272-3701. The examiner can normally be reached on Tuesday-Friday from 7:05 am to 5:35 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Tuan Dam can be reached at (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



ANTONY NGUYEN-BA
PRIMARY EXAMINER

September 26, 2006